

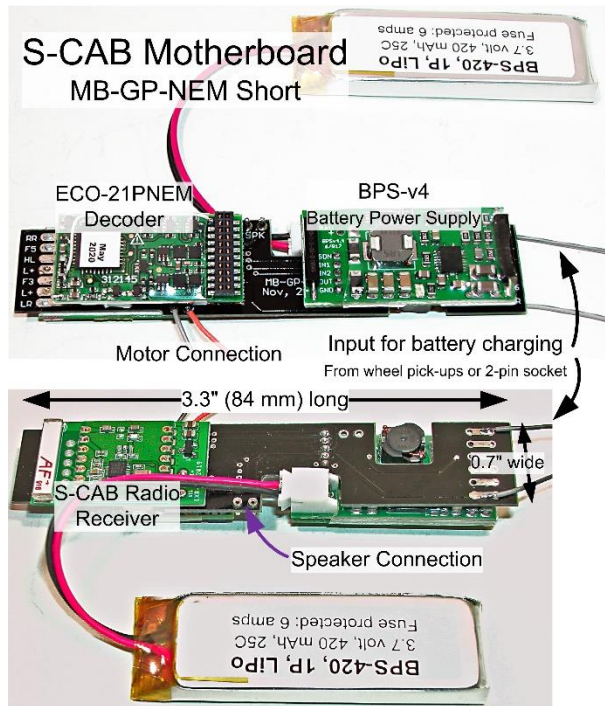
S-CAB Motherboard- MB-GP-NEM-S

For simplified installation of battery power and radio control

Description

S-CAB MB-GP-NEM-S is a motherboard (MB) for HO scale, narrow-hood (typically GP locos), using decoders with 21-pin NEM sockets. "S" is the short version, which, unlike the original (long) version, does *not* include battery space on the motherboard. The important measurements are 3.3" long, 0.7" wide, and 0.41" at thickest point. (84 x 17.5 x 10.5 mm). In some loco models, headroom between top of motor and roof interior is a limiting factor. In some cases, it may be necessary to trim metal castings.

The MB reduces wiring and provides a header for decoders with NEM socket. An S-CAB radio receiver and BPS-v4 battery power supply are pre-mounted on the motherboard. NCE and Soundtraxx decoders modified with S-CAB *direct radio interface* plug into the NEM header.



Application

The MB is designed to slide into a loco body shell with top side (decoder and BPS) against roof. This requires shell interior to be at least 0.7" wide. It positions BPS on/off reed switches close to roof where they can be operated reliably with a magnet wand.



Lights and, if using a sound decoder, a speaker must be installed somewhere in the loco. If a battery does not fit, consider attaching a trailing "battery" vehicle. The MB includes current limiting resistors for all LED light outputs (headlight, rear light, functions F3, F5 and F6). Function F4 is used as a battery-off command.

MB-GP-NEM-S Connections

- L+ is decoder positive common
- F3, F5 and F6 are function outputs for lights
- RR and LR are terminals for battery charging input

